

Transgenic plant producing high grade amylose contg. starch - esp. potato, is transformed with combination of DNA sequences expressing anti-sense transcripts of branching and disproportionating enzymes to suppress amylopectin biosynthesis

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Cited Patents: 2. journal ref.; WO 9211375; WO 9211382; WO 9214827

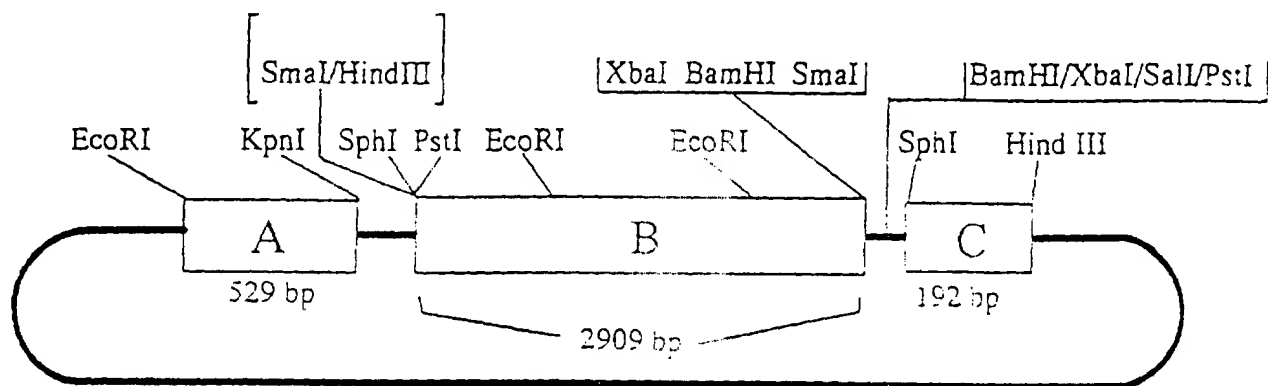
Abstract:

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Combination (A) of DNA sequences comprises (1) the coding region (C1) of a branching enzyme (2) the coding region (C2) of a disproportionating enzyme. Each of these is linked to a promoter and terminator so that transcription in transgenic plants leads to transcripts able to alter the amylose content of natural plant starch resulting in prodn. of a high grade, amylose-contg. starch (HGACS) Also new are (1) prepn. of new transgenic plants able to produce HGACS; (2) plant cells contg. (A); and (3) HGACS isolated from these plants or cells.

USE - HGACS is used in prodn. of foods and industrial materials. The method is esp. applied to potato.

ADVANTAGE - Transformation with (A) results in plants producing starch of higher quality.



Plasmid p35 S-anti-BE 13,6 kb